CLAIMS

1. A method of producing nanoparticles, with a mean diameter equal to or less than 1 μm, and incorporating at least one active ingredient, characterized in that it comprises the following steps:

a) preparing an aqueous chitosan solution,

b) preparing an aqueous glucomannan solution, and

c) mixing, under stirring, the solutions of steps a) and b), such that the chitosan and glucomannan nanoparticles are obtained,

wherein at least one of the solutions of steps a) and b) contains at least one active ingredient.

2. A method of producing nanoparticles according to claim 1, characterized in that the glucomannan solution contains an anionic salt.

3. A method of producing nanoparticles according to claim 2, characterized in that the anionic salt is sodium tripolyphosphate.

4. A method of producing nanoparticles according to claim 3, characterized in that the sodium tripolyphosphate is at a concentration between 0.1 and 5 mg/mL.

5. A method of producing nanoparticles according to any of claims 1 to 4, characterized in that the concentration of the chitosan solution is in the range between 0.5 and 5 mg/mL.

6. A method of producing nanoparticles according to any of claims 1 to 5, characterized in that the concentration of the glucomannan solution is in the range between 0.5 and 50 mg/mL.

7. A method of producing nanoparticles according to any of claims 1 to 4, characterized in that the ratio between chitosan and glucomannan is between 1:0.1 and 1:100.

8. A method of producing nanoparticles according to any of claims 1 to 4 and 7, characterized in that the ratio between chitosan and glucomannan is between 1:0.5 and 1:50.

9. A method of producing nanoparticles according to any of claims 1 to 8, characterized in that the chitosan solution has a pH between 2 and 6.

10. A method of producing nanoparticles according to any of claims 1 to 9, characterized in that the active ingredient is a bioactive macromolecule.

11. A method of producing nanoparticles according to any of claims 1 to 10, characterized in that the active ingredient is chosen from the group comprising insulin, bovine serum albumin and immunogenic proteins.

12. A method of producing nanoparticles according to any of claims 1 to 9, characterized in that the active ingredient is a low molecular weight drug.

13. A method of producing nanoparticles according to any of claims 1 to 9 and 12, characterized in that the active ingredient is chosen from the group comprising acyclovir and indomethacin.

14. A method of producing nanoparticles according to any of claims 1 to 13, characterized in that it comprises an additional step after step c), in which the nanoparticles are lyophilized.

15. Nanoparticles with a diameter equal to or less than 1 μm, for the administration of at least one active ingredient, characterized in that they comprise chitosan, glucomannan and at least one active ingredient.

16. Nanoparticles according to claim 15, characterized in that they are obtainable by means of the method according to claims 1 to 11.

17. Nanoparticles according to any of claims 15 and 16, characterized in that they further comprise an anionic salt.

18. Nanoparticles according to claim 17, characterized in that the anionic salt is sodium tripolyphosphate.

19. Nanoparticles according to any of claims 15 to 18, characterized in that the active ingredient is a bioactive macromolecule.

20. Nanoparticles according to any of claims 15 to 19, characterized in that the active ingredient is selected from the group comprising insulin, bovine serum albumin and immunogenic proteins.

21. Nanoparticles according to any of claims 15 to 18, characterized in that the active ingredient is a drug of low molecular weight.

22. Nanoparticles according to any of claims 15 to 18 and 21, characterized in that the active ingredient is selected from the group comprising acyclovir and indomethacin.

23. Nanoparticles according to any of claims 15 to 22 characterized in that the chitosan:glucomannan ratio is between 1:0.02 and 1:100.

24. Nanoparticles according to any of claims 15 to 23, characterized in that the chitosan:glucomannan ratio is between 1:0.5 and 1:50.

25. Nanoparticles according to any of claims 15 to 22, characterized in that they are lyophilized after they are obtained.

26. A pharmaceutical composition, characterized in that it comprises the nanoparticles according to any of claims 15 to 24 and at least one pharmaceutically

acceptable excipient.

27. A cosmetic composition, characterized in that it comprises the nanoparticles according to any of claims 15 to 24 and at least one cosmetically acceptable excipient.

28. A pharmaceutical composition, characterized in that it comprises the nanoparticles of claim 25, after being regenerated by means of the addition of water, and at least one pharmaceutically acceptable excipient.

29. A cosmetic composition, characterized in that it comprises the nanoparticles of claim 25, after being regenerated by means of the addition of water, and at least one cosmetically acceptable excipient.